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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/348,865	07/07/1999	EITAN MEDINA	MP0107	5861
23624	7590	07/02/2004	EXAMINER	
MARVELL SEMICONDUCTOR, INC. INTELLECTUAL PROPERTY DEPARTMENT 700 FIRST AVENUE, MS# 509 SUNNYVALE, CA 94089			ABELSON, RONALD B	
			ART UNIT	PAPER NUMBER
			2666	21

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/348,865	MEDINA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ronald Abelson	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 3/23/2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-5 and 7-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 2 and 7-16, and 27-28 is/are allowed.
- 6) Claim(s) 1.17 and 18 is/are rejected.
- 7) Claim(s) 3-5 and 19-26 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 07 July 1999 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 recites the limitation "said other ports" in line 15. There is insufficient antecedent basis for this limitation in the claim.
3. Claim 3 recites the limitation "said device output buffers" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.
4. Claims 17 and 18 recite the limitation "said N-1 ports" in line 6. There is insufficient antecedent basis for this limitation in the claim.

***Allowance Subject Matter***

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5. Regarding claims 1, 2, 7, 17, 18, and 28, DiPlacido (US 6,226,292) teaches a method and apparatus for a data network (fig. 1): comprising at least one crossbar (fig. 1 box 12, col. 3 line 65), wherein each crossbar comprises N ports / interfaces (fig. 1 box 11 and three Fast Ethernet interfaces box 10, col. 3 lines 56-61).

The system comprises a plurality N of devices each associated with and connected to one port of one of said crossbars (fig. 1 links, col. 3 lines 65-67).

Each one port / interface of one crossbar comprises an input buffer (fig. 4 box 50) and a plurality of output buffers (fig. 4 box 62).

However, nothing in the prior art of the record teaches or fairly suggests each one port / interface comprises a plurality of N-1 of port output buffers, each corresponding to one of said N-1 other ports, wherein each of said plurality of N-1 port output buffers receives said messages only from a corresponding input buffer corresponding to one of said N-1 other ports. In contrast, DiPlacido teaches one output buffer per link (col. 4 lines 34 - 37).

Regarding claims 16 and 27, DiPlacido teaches a network switch (fig. 2 box 18, col. 4 lines 20-22) in communication with

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one port (fig. 1 box 10) of a crossbar (fig. 1 box 12, col. 3 line 65) having N ports (fig. 1 box 11 and three Fast Ethernet interfaces box 10, col. 3 lines 56-61).

The network switch comprises: a FIFO (fig. 4 box 50) and a plurality of output buffers (fig. 4 box 62).

However, nothing in the prior art of the record teaches or fairly suggests each network switch comprises N-1 of port output buffers, each corresponding to N-1 other ports of the N ports of the crossbar. In contrast, DiPlacido teaches one output buffer per link (col. 4 lines 34 - 37).

***Prior art is of record***

6. The prior art is of record but not relied upon in the office action.

Peters teaches a crossbar (fig. 1 box 19) in communication with a plurality of devices.

***Response to Arguments***

7. Applicant's arguments, see Appeal Brief, filed 3/23/2004, with respect to 1, 7, and 18, have been fully considered and are persuasive. The non-final action of 11/03/2004 has been withdrawn. Regarding claims 7 and 18, the examiner agrees with

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the applicant that Calvignac does not teach N-1 buffers corresponding to N-1 ports (applicant: pg. 7 last paragraph). Regarding claim 1, the examiner agrees with the applicant that Calvignac does not teach N ports, with each one port comprising an input buffer and a plurality N-1 of port output buffers, each corresponding to one of said N-1 other ports .(applicant: pg. 13 2<sup>nd</sup> to last paragraph).

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*ra*

Ronald Abelson  
Examiner  
Art Unit 2666

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6/28/04

*Seema S. Rao*  
SEEMA S. RAO 6/28/04  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800